

REMARKS/ARGUMENTS

A response to the Office Action of August 6, 2004 was deemed non-responsive by the Examiner in a communication dated December 2, 2004, and Applicants were provided with a period of 30 days to submit a conforming amendment.

Claims 23 – 27 and 30 – 36 remain in this application. Claims 23, 24 – 26, 30, 34 and 35 have been amended. Claims 1 – 22, 29 and 37 – 43 have been canceled. Claims 1 – 22 and 37 – 43 have been canceled as a result of an earlier restriction requirement. In view of the examiner's earlier restriction requirement, applicant retains the right to present claims 1 – 22 and 37 – 43 in a divisional application.

Claims 23-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Jang (U.S. Patent No. 4,389,229).

Applicants believe the amendment to claim 23 overcomes the rejection. The Examiner asserts that Jang discloses modulating oxygen as a method of maintaining a substantially constant pressure. Applicants point out that Jang discloses a method by which "the pressure within the exhaust system is maintained substantially constant" (Abstract). To facilitate this control, Jang employs a soot-free gas supply, e.g. oxygen or nitrogen (column 4, lines 1-6) which is flowed into an exhaust portion of the apparatus. Jang does not disclose modulating a flow rate of a glass precursor material which is flowed into a deposition zone of a substrate in response a pressure change within the deposition zone. Jang also does not disclose forming a plasma within the substrate. Applicants argue that Jang does not anticipate Applicants' invention.

Support for Applicants' amendment can be found, for example, on page 15, paragraph 00058 of the present application, stating, inter alia, that "once the pressure in the deposition zone of substrate 20 reaches a pre-determined point...the mass flowrate of precursors into the deposition zone is changed...(lines 12-15) See also lines 18-19: "in an ideal situation, the pressure is maintained at the predetermined point...and the mass flowrate is changed an infinite amount of times." Paragraph 56, lines 12-15, page 14 define the pressure in the deposition zone as P_D .

Claims 31-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jang 4389229.

Applicants believe the foregoing amendments overcome the rejection.

Claims 23 and 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuppers 4314833.

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Applicants believe the foregoing amendments overcome the rejection. The Examiner argues that, with the exception of changing the flow rates or keeping the pressure constant, Kupper teaches Applicants invention. The Examiner further contends that it would be obvious to maintain the pressure (e.g. at 13 mbar) because Kupper in the referenced passage teaches no other pressure. Nevertheless, Kupper does not teach or fairly suggest modulating a flow rate of a glass precursor material which is flowed into a deposition zone of a substrate in response a change in pressure within the deposition zone. Applicants assert that in view of the foregoing amendments, Applicants' invention is nonobvious in view of Kupper, and the rejection should be withdrawn.

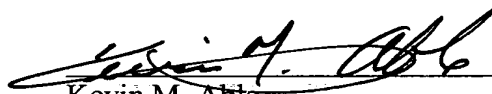
Based upon the above amendments, remarks, and papers of records, Applicants believe the pending claims of the above-captioned application are in allowable form and patentable over the prior art of record. Applicants respectfully requests that a timely Notice of Allowance be issued in this case.

Applicants believe that no extension of time is necessary to make this Reply timely. Should applicant be in error, Applicants respectfully request that the Office grant such time extension pursuant to 37 C.F.R. § 1.136(a) as necessary to make this Reply timely, and hereby authorize the Office to charge any necessary fee or surcharge with respect to said time extension to the deposit account of the undersigned firm of attorneys, Deposit Account 03-3325.

Please direct any questions or comments to Kevin M. Able at 607-974-2637.

Respectfully submitted,

DATE: 12/16/04



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